

## THIE UNITED STATES OF AMERICA

<u>roau rownom wese presents shau come:</u> IXPI Technology Holding Corp.

MILETERS, THERE HAS BEEN PRESENTED TO THE

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY ROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

#### **SOYBEAN**

'DP 5960 RR'

In Vestimonn Marcert, I have hereunto set my hand and caused the seal of the Plant Mariety Protection Office to be affixed at the City of Washington, D.C. this tenth day of April, in the year two thousand three.

anteneman

Secretary of Agriculture

AGRICULTURAL MARKETING SERVICE

SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued

APPLICATION FOR PLANT VARIS (Instructions and information collections)			TE	(7 U.S.C. 24	21). Information is h	eld confidential u	ntil certificate is is:	sued (7 U.S.C. 2426).
1. NAME OF OWNER				<u>.                                      </u>	2. TEMPORARY D		R 3. V	ARIETY NAME
D&PL Technology Holding Co.	p.				EXPERIMENTA DPX 9	0759 RR		DP 5960 RR
4. ADDRESS (Street and No., or R.F.D. No., City, S	tate, and ZiP Code	e, and Country )			5. TELEPHONE (in	clude area code	)	
PO Box 157					(662	2) 742-4141	₽VP-	97 <i>0026</i> 1
100 Main Street Scott, Mississippi 38772					6. FAX (include are	ea code)		7+00201
USA					(662) 742-3182			IG DATE
					·			
<ol> <li>IF THE OWNER IS NOT A "PERSON" GIVE FOR ORGANIZATION (corporation, partnership, associated)</li> </ol>		IF INCORPORATE STATE OF INCORE	·			'	April 4, 1994	
	Corporation Delaware				Febru			
10. NAME AND ADDRESS OF OWNER REPRESE	NTATIVE(S) TO SI			(First person		-	F	LING AND EXAMINATION
Delta and Pine Land Company Kelly Casavechia P.O. Box 157 Scott, MS 38772			·					EE:  2,450.%  ATE April 4,1997  ERTIFICATION FEE:  320
11. TELEPHONE (include area code) 12. FAX (in	clude area code)		13. E_M/	AIL,			14. CROP KIND	
(662) 742-4141	(662) 742-4141 (662) 742-3182				chia@deltaand	pine.com		Soybean
15. GENUS AND SPECIES NAME OF CROP		16, FAMILY	NAME (Bot	anical)			17. IS THE VARI HYBRID?	ETY A FIRST GENERATION
Glycine Max			Legum	inosae			   □ <sub>Y</sub> i	ES XNO
18. CHECK APPROPRIATE BOX FOR EACH ATTA	CHMENT SUBMIT	TED (Follow		ŧ				BE SOLD AS A CLASS OF
instructions on reverse).  a. X Exhibit A. Origin and Breeding History of b. X Exhibit B. Statement of Distinctness c. X Exhibit C. Objective Description of the Va d. X Exhibit D. Additional Description of the Va	riety				ED SEED? (See Sed YES (If "yes", answe and 21 below)	r items 20	<b>X</b> NO (	ection Act) f "no", go to item 22) IMITED AS TO NUMBER
e. X Exhibit E. Statement of the Basis of the C	wner's Ownership				RATIONS?	THAT SEED OF T	INIS VARIETT BE E	WITED AS TO NOMBER
f. X Voucher Sample (2,500 viable untreated s verification that tissue culture will be depo					YES		XNO	
repository)						H CLASSES OF F		YOND BREEDER SEED?
g. x Filing and Examination Fee (\$2,450), mac States" (Mail to the Plant Variety Protectio		surer of the United			FOUNDATION	REGISTE	RED	CERTIFIED
22. HAS THE VARIETY (INCLUDING ANY HARVES FROM THIS VARIETY BEEN SOLD, DISPOSED OTHER COUNTRIES?	OF, TRANSFERE		HE U. S. C	PROPER	TY RIGHT (PLANT BR YES	REEDER'S RIGHT	OR PATENT)?	CTED BY INTELLECTUAL
IF YES, YOU MUST PROVIDE THE DATE OF FI FOR EACH COUNTRY AND THE CIRCUMSTAI				_	SIVE COUNTRY, DA NCE NUMBER. (PIE			
The owners declare that a viable sample of basic for a tuber propagated variety a tissue culture wi	seed of the variety	will be furnished wit	th application	on and will be	replenished upon re	quest in accorda		
The undersigned owner(s) is(are) the owner of the and is entitled to protection under the provisions	of Section 42 of the	Plant Variety Protect	ction Act.	-	elieve(s) that the var	iety is new, distir	net, uniform, and s	table as required in Section 42,
Owner(s) is(are) informed that false representations	on herein can jeopa	ardize protection and		enalties. RE OF OWNE	R.			
1/1/1. 1/1/2			3,514/10	OF OVVINE	<del></del>			
NAME (Please print or type)			NAME (PI	ease print or t	/nel			
			TO STATE OF IT	case print of t	(F-1)			
William V. Hugie  CAPACITY OR TITLE	DATE		CAPACITY	Y OR TITLE				DATE
'ice President/Dir.of Research			on non	. OR IIILL				

#### Instructions

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check paybable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

#### ITEM

- 18a. Give:
- (1) the genealogy, including public and commercial varieites, lines, or clones used, and the breeding method
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of realted varieties:
  - (1) Identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filling date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

  ROUNDUP READY® cotton: ≤oyb201 (bb: 10/30/202)

These seeds are covered under U.S. Patents  $5,633,435;\ 5,352,605;\ 5,530,196;\ 5,188,642;\ 4,940,835;\ 5,717,084;\ 5,728,925;\ and <math>5,804,425.$ 

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed/ls-sd.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to repond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U. S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marks or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audictape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T -470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6,0a. Replaces STD-470 (02-99) which is obsolete

# **EXHIBIT A**D&PL TECHNOLOGY HOLDING CORP.'S APPLICATION FOR DP 5960 RR

## ORIGIN AND BREEDING HISTORY

Winter	1991-92	
		Original constraint final bank and a balance BBV 0004
Summer	1992	Original cross and first backcross made between DPX 2384, an experimental breeging line, and Roundup Resistant
		experimental line 40-2-3 (phanged is permission (11/26/2002) bt)
Fall	1992	DP 415 crossed with Roundup resistant F₁ plants from 2384 BC₁F₁
Winter	1993	P9592 crossed to Roundup resistant F₁ plants from DP415 x 2384 BC₁F₁
Summer	1993	Cross 93408 made - A5979 crossed to Roundup resistant F <sub>1</sub>
Sammer	1995	plants from P9592 x (DP 415 x 2384 BC <sub>1</sub> F <sub>1</sub> )
Winter	1993-94	Roundup tolerant F <sub>1</sub> plants advanced to F <sub>2</sub> under lights from cross 93408 under lights in Costa Rica and F <sub>2</sub> seed was
0	4004	bulked.
Summer	1994	Roundup resistant F <sub>2</sub> advanced to F <sub>3</sub> by modified single seed descent in Costa Rica
Fall	1994	Roundup resistant F <sub>3</sub> plants space planted. Individual plant
•		selections harvested and threshed separately
Winter	1994-95	F₄ Roundup resistant plant rows from cross 93408 were
		grown in 3 meter rows in Costa Rica. Row 93408-712 was
		selected, composited and determined to be uniform and
		stable for characteristics described in Exhibit C of this
		application. No variants were known or observed at this
		time and hence to the present.
Summer	1995	Yield tested at Scott, Mississippi.
Fall	1995 -	Tiera toutou at Goott, Middledippi.
Spring	1996	Border rows harvested and sent to Costa Rica for a double
Oprilig	1000	increase in Fall of 1995 and Winter of 1996. About 150
Cummer	1006	units of breeder seed were produced.
Summer	1996	93408-712 yield tested in 9 Delta and Pine Land Company
		tests and increased to 2268 bushels of foundation seed.
		93408-712 was designated as DPX 9759 <sup>RR</sup>
Summer	1997	DPX 9759 <sup>RR</sup> designated and released as DP 5960RR.

#### EXHIBIT B

DELTAPINE SEED'S APPLICATION FOR DP 5960RR D&PL Technology Holding Corporation (BT: 9/30/2002)

#### **NOVELTY STATEMENT**

To our knowledge, DP 5960RR most resembles A5979, DP 5806RR, and DP 6200RR. Differences include, but are not restricted to the following:

- 1) DP 5960RR is resistant to frogeye leafspot, whereas A5979 is susceptible.
- 2) DP 5960RR is resistant to Roundup herbicide whereas A5979 is susceptible.
- 3) DP 5960RR is sensitive to high chloride soils whereas DP 5806RR is tolerant to high chloride soils
- 4) DP 5960RR is resistant to soybean mosaic virus whereas DP 5806RR is segregating for resistance to soybean mosaic virus
- 5) DP 5960RR has shiny seed coats whereas DP 6200RR has dull seed coats.

#### PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MARYLAND 20105

## OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max LJ

Pelta ( Peltapi Abbness 100 MA	The Seed S (Spect and	Land Compan	Holding Corporation	DPX9	ARY DESIGNATION	DP 5960R		
Peltap Abones 100 MA	The Seed S (Spect and	DEPL Technology No. or R.F.D. Od.	Holding Corporation	ion	759RR	3,001	<u>-</u>	
Xboness 100 MA Choose the	S: (Street and	No., or R.F.D. Nd.,	City, State, and Zip	ion		FOR O	EEICAL INT OU	
100 MA				Códel		FORO	EEICIAL TEE OU	
Choása t	IN STREE	ET, SCOTT, M	ים מדדים			,	LELOWIC ORE ON	.Y
Choása t		,,	5 10//Z			PVPO NUMBER		
Choose th								a
Choose t					·	1 009	170021	81
Starred di when info 1. SEED S	nsweris lew hatacters * commadon is a SHAPE;  - Spherical (	ere considered fur		ded; place a ten dequate soybes    u   t	o in the lint box o	when number is 9 (on. Other charact	or less (egg. 10) ers should be des	911
SEED C	OAT COLOR	: [Mature Seed]						<del>-</del>
							·	
1 1	- Yellow	2 = Green	3 = Brown	4 = 864ck	, 5 ≈ Other (	Specify]		
٠٠						-		
SEED C	OAT LUSTE	R: (Mature Hand SI	relied Seedi		· · · · · · · · · · · ·		•	
						s		
2 1	- Dull (*Core	oy 79°; "Braxton"	2 - Shiny (N	ebsoy : "Gesoy 17	m .		,	
SEED S	IZE: (Mature	Seed]			· · · · · · · · · · · · · · · · · · ·			
<del>.</del>	•	•						
. 5 G	Grams per 100	seeds						
. HILUM	COLOR: (M	iture Seed)		-		· · · · · · · · · · · · · · · · · · ·		
7 1	Baff	2 - Yellow	3 ≈ Brown	4 = Grey	5 = Imperfect Blac	ik 6≃86±ck	7=Other(Soc Varies Buf	<i>∷i(y)</i> É∷to:
. מדינו	EDON COLO	R: (Mxture Seed)				*	- Imperieu	<del>Diaca</del>
	~ Yellow	2 = Green						٠
SEED PE	ROTEIN PER	OXIDASE ACTIVIT	ry:					
2 1	- tow	2 = High		081				
SEED 21	ROTEIN EI E	CTROPHORETIC E	IAND-					
		5				. •		
'	* Type A (SP	t = 1	2 - Type B (SP16	'1				
HYPOC	017L COLO	R:						<del></del>
		("Evans"; "Davis")	2 ~ Green	with bronze band	below cotyledors (7	foodworth"; "Tracy")		-
[⊥] 3	- Light Purpl	e below catyledons c extending to unifo	("Beeson": Pickett 7 oliate leaves ("Hodgsc		on 266A1			
4	- Light Purpl				on 265A1			

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* 0	Pod and Stem	Blight (Disporthe physeolonia vzc. sojec)		0097	00261
0	Pumle Seed Si	ain (Oercospora kikuchii)			
0	Rhizoctonia R	oot Rot (Rhizoctonia solani)			970026
	Phytophthora	Rot (Phytophthars megssperms vsc. sojech			
* [1	Race 1	Race 2 Race 3	Race 4 Race 5	Race 6	Race 7
	Race 8	Race 9 Other (Specify)			
. VI	TAL DISEASES:		1 <b>3</b> 4		
0	Bud Blight (To	Stania toquenin occade		Karana da k	
0	Yellow Mossic	: (Bean Yellow Mossic Virus)			
* 0	Compes Mossi	c (Cowpes Chlorotic Virus)			
2	Pod Mottle (B	ean Pod Mottle Virus)			
* 2		Soybean Mossic Virusi	,	•	
	MATODE DISEA				
WE					-
1. [0	7 [	Nematode (Heterodera glycines)	Race 4 2 Other 6	Specify/ RACE 1	٨
* [0	JR⊌cc1 [ ⊓	0 Race 2 2 Race 3 (	[2] 00.20 h	JACOPYNAULE	
<u>[0</u>	-	ode (Hoplalsimus Colombus)	· ţ	*	
* 1	Southern Roo	t Knot Nematode (Melaidogyne Incognita)			
* 0	Northern Roo	t Knot Nematode (Meloidogyne Hapla)			
1	Peanut Root I	Knot Nematode (Meloidogyne arenaria)	_		
0	Reniform Ner	natode (Rotylenchulus reniformis)	*		
<u> </u>	OTHER DISE	ASE NOT ON FORM (Specify):			
				· · · · · · · · · · · · · · · · · · ·	·
	SIOLOGICAL RE T	SPONSES: (Enter 0 = Not Texted; 1 = Suss	eptible; Z = Resutant		
* [	_	on Calcaneous Soil DP 5960RR	•		
	Other (Specif	vl <u>DPX9759</u> is sensitive	to high chloride s	oils	
21. INS	CT REACTION:	(Enter 0 = Not Tested; 1 = Susceptible; 2 =	Resistanti		
0	Mexican Bear	Beetle (Epilochno vorivestis)			
2	Potato Leal I	lopper (Emposses fabae)	•	•	
0	Other (Special	(v)			
22. IND	ICATE WHICH V	ARIETY MOST CLOSELY RESEMBLES T	HAT SUBMITTED.		
		NAME OF VARIETY	CHARACTER	NAME	OF VARIETY
Plan	t Shape	A5979	Seed Coat Luster	DP35198	
Leaf	Shape	DP 3519s	Seed Size	A5979	
(Jeal	Color	DP 3519s	Seed Shape	A5979	
	Size	DP 3519 <sup>8</sup>	Seedling Pigmentation	A5979	

#### 71 GIVE DATA FOR STREET TO THE STANDARD VARIETY: Paled Comparison De

VARIETY	NO OF	PLANT LODGING	CM PLANT	LEAFL	ET SIZE	SEED CON	TENT	SEE0 SIZE G/100	NO.
	MATURITY		HEIGHT	CM Midth .	CM Length	X Frateln	X OH	SEEOS	50932 720332
DPX9759RR Sybmitted DP 5960RR	131	1.2	56					15	
DP 35198 Name of Similar Variety	122	1.0	46					15	

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
- 3. Hymoritz, T. 1973. Electrophoretic analysis of SBTI-A2 in the USDA soybean gemplam collection. Crop Sci. 13: 420-421.
- 4. Payne, R.C. and L.F. Morrie. 1976. Differentiation of soybean cultivary by secoting pigmentation patterns. J. Seed Technol. 1: 1-19.

LS: 1d 8-9NV /6.

O4A4-CHY YUSh

TAPINE SEED'S APPLICATION FOR DP 5960RR echnology Holding Corporation (15139/3012002)

#### ADDITIONAL DESCRIPTION OF VARIETY

DP 5960RR is an F<sub>3</sub> Roundup tolerant selection composited in the F<sub>4</sub> generation from the cross of A5979 x [P9592 x (DP 415 x 2384 BC<sub>1</sub>F<sub>1</sub>)] derived from line 40-3-2 with Roundup tolerant. DP 5960RR has white flowers, gray pubescence, and tan pods. Seeds average 3000 seeds per pound and are delivered with buff to imperfect black hila as affected by environment. DP 5960RR is resistant to races 3 and 14 of soybean cyst nematode, frogeye leafspot and soybean mosaic virus. It is moderately resistant to stem canker and susceptible to root knot nematodes and aerial blight. It is sensitive to high chloride soils. DP 5960RR, based on 9 Deltapine tests (1/3) across the South, show that it is very competitive in yield to DP 3588 and superior to Roundup tolerant varieties H5088RR, H5566RR and AG6101RR.

### SOYBEAN VARIETY DESCRIPTION

Suggested Nominee Number: DPX9759RR

Experimental Designations: 93408-712 Key #5881 DPX7RR

Submitted by: Grover Shannon

Date Submitted: January 1, 1997

Parentage: A5979 x [P9592 x (DP 415 x 2384 BC<sub>1</sub>F<sub>1</sub>)] Cross 93-408

2384 - Selection from DP 415/DP 105

Maturity: Late group V - RM = 5.9

Data Collected from 9 Replicated Yield Tests.

I. Plant & Seed Characteristics:

Flower Color:

White

Pubescence Color:

Gray

Hilum Color:

Buff

Pod Wall Color:

Tan

Seed Coat Luster:

Dalt Shiny (bt: 3/29/2002)
Der applicant's perm

per applicant's permission per telephone request.

Leaf Shape:

Ovate

Plant Type:

Determinate

### II. Agronomic Characteristics: 1996

Line	Mat	Plant Height	T d~	Shat.
DPX9759 <sup>RR</sup>	0 = 1	neight 22	Ldg. 1.4	Bxc.
DP 3588	+3	27	1.5	Exc.
HUTCHESON	0	16	1.0	Exc.
AG5601	-5	18	1.1	Good
H5088RR	-2	19	1.2	Exc.
H5566RR	-2	19	1.1	Exc.

#### III. Yield Data:

1996 Yield & Agronomic Data Summary

Line	Yield	% Yield	Mat.	Hgt.	Ldg.
DPX9759 <sup>RR</sup>	47.8	105	0	22	1.4
DP 3588	46.9	102	+3	27	1.5
HUTCHESON	45.9	100	0	16	1.0
AG5601	41.8	91	<b>-</b> 5	18	1.1
H5088RR	39.1	85	-2	19	1.2
H5566RR	38.5	84	-2	19	1.1
# Tests	9	9	3	9	9

Yield Summary in Bu/A

By Region: 1996

	1						
	N of	I-40	Sof	I-40	MEAN		
LINE	YLD	% YLD	YLD	% YLD	YLD	% YLD	
DPX9759 <sup>kk</sup>	40,6	96	51.5	108	47.9	105	
DP 3588	35.0	83	52.9	111	46.9	102	
HUTCHESON	42.4	100	47.7	100	45.9	100	
AG5601RR	35.2	83	45.3	95	41.9	91	
H5088RR	30.1	71	43.3	91	39.1	85	
H5566RR	34.8	82	40.7	85	38.5	84	
# TESTS	3		6	6	9	9	

By States: 1996

LINE	TN AR		MS	MS LA		MEAN	
DPX9759 <sup>RR</sup>	47.2	49.4	41.6	59.7	32.1	47.8	
DP 3588	38.6	44.1	46.3	62.1	34.7	46.9	
HUTCHESON	46.8	47.3	32.6	60.2	39.4	45.9	
AG5601RR	44.5	43.2	31.8	52.9	34.2	41.9	
H5088RR	37.2	36.6	34.3	53.2	29.5	39.1	
H5566RR	37.2	42.9	22.8	50.7	35.9	38.5	
# TESTS	Ţ	3	2	2	1	9	

By Soil Type Planting and Disease Situation: 1996

Line	Loam	Clay	Cyst	Early Planted	Aerial Blight	Mean		
DPX9759 <sup>RR</sup>	40.6	51.9	53.1	47.1	51.7	47.8		
DP 3588	35.1	58.5	50.2	46.6	53.1	46.9		
HUTCHESON	42.4	51.0	50.5	31.1	50.5	45.9		
AG5601RR	35.2	46.0	51.4	38.1	39.1	41.9		
H5088RR	30.5	49.8	42.5	30.9	44.5	39.1		
H5566RR	34.8	44.6	48.7	22.8	35.0	38.5		
# TESTS	3	2	2	1	1	1		

YIELD IN BU/A BY TESTS AND LOCATIONS

1996 - 655M

	TN	AR	AR	AR	MS	MS	LA	LA	NC	
LINE	UC	HS	DW	DM	SL	SC	${ m TL}$	MG	CL	Mean
DPX9759 <sup>RR</sup>	47.2	42.6	50.4	55.8	47.1	36.0	67.7	51.7	32.1	47.8
DP 3588	38.6	31.9	46.0	54.4	46.6	46.0	71.0	53.1	34.7	46.9
HUTCHESON	46.8	41.0	46.5	54.4	31.1	34.0	69.9	50.5	39.4	45.9
AG5601	44.5	26.9	47.9	54.8	38.1	25.4	66.6	39.1	34.2	41.9
H5088RR	37.2	24.7	39.7	45.3	30.9	37.7	61.9	44.5	29.5	39.1
H5566RR	37.2	31.3	49.4	48.0	22.8	22.8	66.4	35.0	35.9	38.5
C.V. %	10.4	13.6	12.0	7.8	13.5	13.2	5.9	9.3	11.0	
LSD.10	6.6	6.4	5.5	4.7	6.1	5.7	4.2	4.7	3.9	

#### DISEASE REACTION AND OTHER INFORMATION:

9700261

Cyst Nematode

DPX 9759RR is resistant to both races 3 and 14 of soybean cyst nematode.

	Ra	<u>ac</u>	≘	3				
	1994							
	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>			
DPX 9759RR	7	0	0	0	0			
Res. Chk.	9	0	0	0	0			
Sus. Chk.	0	0	3	8	2			

Location:

Jackson, TN

Conducted by: Dr. Lawrence Young

USDA, Nematologist

	Ra	1C6	3	14	1	
	19	996	5			
	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
DPX 9759RR	1	2	1	3	0	
Res. Chk.	3	4	0	0	0	
Sus. Chk.	0	0	0	0	6	

Location:

Jackson, TN

Conducted by:

Dr. Lawrence Young

USDA, Nematologist

Root Knot Nematode 1 = No galling 5 = Very severe galling DPX 9759RR is susceptible to both common and peanut root knot nematode.

	Common Root Knot <u>M. Incognita</u> <u>1996</u>	Peanut Root Knot <u>M. arenaria</u> <u>1996</u>
DPX 9759RR	3.0	4.5
Res. Check	0.0	2.0
Sus. Check	5.0	5.0

Location:

Conducted by:

Jay, FL Dr. Robert Kinloch

Professor of Nematology University of Florida

1 = No symptoms 5 = Very severe symptoms DPX9759RR is moderately resistant to stem canker.

<u>1</u>	<u> 996</u>
DPX9759 <sup>RR</sup> 1	.0
HARTWIG 5	.0
P9592 0	.7
DP 415 0	.0

Location:

Scott, MS - Greenhouse

Conducted by: Grover Shannon

Froqeye Leaf Spot 1 = None 5 = Very Severe DPX9759 is untested against frogeye leafspot.

#### Sudden Death Syndrome

DPX9759RR is untested against sudden death syndrome.

Aerial Blight 1 = None 5 = Very Severe DPX9759RR is moderately susceptible to aerial web blight.

	<u> 1996</u>
DPX9759RR	2.9
DP 3588	1.9
HUTCHESON	2.7
CLIFFORD	4.0
H5566RR	3.8

Location: Morganza, LA Conducted by: Grover Shannon

 $\frac{\text{Herbicide Tolerance}}{\text{DPX9759}^{\text{RR}}}$  is tolerant to the herbicide Roundup. It has no known sensitivity to other herbicides used according to the herbicide label.

 $\frac{\text{Chloride Tolerance}}{\text{DPX9759}^{\text{RR}}} \text{ is a root includer of chloride and is considered}$ sensitive to high chloride conditions in soils.

	No. of Plants	as Chloride
	<u>Includers</u>	Excluders
DPX 759 <sup>RR</sup>	5	0

<u>Soybean Mosaic Virus</u>
DPX9759<sup>RR</sup> is resistant to soybean mosaic virus based on limited observations.

 $\frac{\text{Seed Stock}}{\text{There are 2268 bushels of DPX9759}^{\text{RR}}} \text{ foundation seed.}$ 

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	Application is required in order to dete	rmino if a plant variety protection
	certificate is to be issued (7 U.S.C. 24)	21). The information is held
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	confidential until the certificate is issue	ed (7 U.S.C. 2426).
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
D&PL TECHNOLOGY HOLDING CORP.	OR EXPERIMENTAL NUMBER	DP 5960 RR
Dai 2 Teorinocoo i Holbino com .	DPX 9759 RR	DF 3900 KK
<ol> <li>ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)</li> </ol>	5. TELEPHONE (Include area code)	6. FAX (Include area code)
and an , and soundly)	662.742.4141	662.742.3182
P.O. BOX 157	7. PVPO NUMBER	
SCOTT, MISSISSIPPI 38772	97002	261
B. Does the applicant own all rights to the variety? Mark an "X" in the		
Does the applicant own all rights to the variety? Walk all A In th	ie appropriate block. Il 110, piease explaii	n. YES N
,		
Is the applicant (individual or company) a U.S. national or a U.S. t	based company? If no, give name of co	untry. X YES N
D. Is the applicant the original owner?	NO If no, please answer <u>one</u> o	f the following:
	-	
a. If the original rights to variety were owned by individual(s), is		
	1 1	
YES	(are) the original owner(s) a U.S. National  NO If no, give name of country	
I [	1 1	
YES	NO If no, give name of country	
I [	NO If no, give name of country	ed company?
b. If the original rights to variety were owned by a company(ies)	NO If no, give name of country	ed company?
b. If the original rights to variety were owned by a company(ies)  YES  YES	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country	ed company?
b. If the original rights to variety were owned by a company(ies)	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country	ed company?
b. If the original rights to variety were owned by a company(ies)  YES  YES	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country	ed company?
b. If the original rights to variety were owned by a company(ies)  YES  1. Additional explanation on ownership (If needed, use the reverse	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):	ed company?
b. If the original rights to variety were owned by a company(ies)  YES  YES	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):	ed company?
b. If the original rights to variety were owned by a company(ies)  YES  1. Additional explanation on ownership (If needed, use the reverse)  DP 5690 RR contains a proprietary gene, patented by	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):	ed company?
b. If the original rights to variety were owned by a company(ies)  YES  1. Additional explanation on ownership (If needed, use the reverse)  DP 5690 RR contains a proprietary gene, patented by	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):	ed company?
b. If the original rights to variety were owned by a company(ies)  YES  1. Additional explanation on ownership (If needed, use the reverse)  DP 5690 RR contains a proprietary gene, patented by	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):	ed company?
b. If the original rights to variety were owned by a company(ies) YES  1. Additional explanation on ownership (If needed, use the reverse  DP 5690 RR contains a proprietary gene, patented to which encodes a protein which provides tolerance to	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):	ed company?
b. If the original rights to variety were owned by a company(ies)  YES  1. Additional explanation on ownership (If needed, use the reverse  DP 5690 RR contains a proprietary gene, patented by which encodes a protein which provides tolerance to	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):  by the Monsanto Company and lice of glyphosate herbicide in cotton co	ed company?
b. If the original rights to variety were owned by a company(ies) YES  1. Additional explanation on ownership (If needed, use the reverse  DP 5690 RR contains a proprietary gene, patented to which encodes a protein which provides tolerance to the contains a proprietary gene, patented to which encodes a protein which provides tolerance to the contains a proprietary gene, patented to the owners (not license)	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):  by the Monsanto Company and lice of glyphosate herbicide in cotton country  sees) who meet the following criteria:	ed company?  censed to D&PL, ultivars.
b. If the original rights to variety were owned by a company(ies) YES  1. Additional explanation on ownership (If needed, use the reverse  DP 5690 RR contains a proprietary gene, patented to which encodes a protein which provides tolerance to which encodes a protein which provides tolerance to the tolerance tolerance to the tolerance toleranc	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):  by the Monsanto Company and lice of glyphosate herbicide in cotton country  sees) who meet the following criteria:	ed company?  censed to D&PL, ultivars.
b. If the original rights to variety were owned by a company(ies)  YES  Additional explanation on ownership (If needed, use the reverse  DP 5690 RR contains a proprietary gene, patented by which encodes a protein which provides tolerance to which encodes a protein which provides tolerance to the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals of the rights to the variety are owned by the company which employnationals of a UPOV member country, or owned by nationals of a country of the company which employnationals of a UPOV member country, or owned by nationals of a country of the company which employnationals of a UPOV member country, or owned by nationals of a country of the company which employnationals of a UPOV member country, or owned by nationals of a country of the company which employnationals of a UPOV member country, or owned by nationals of a country of the company which employnationals of a UPOV member country, or owned by nationals of a UPOV member country, or owned by nationals of a UPOV member country.	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):  by the Monsanto Company and lice of glyphosate herbicide in cotton country  sees) who meet the following criteria:  person must be a U.S. national, national of the U.S. for the same genus and species  yed the original breeder(s), the company is	ed company?  censed to D&PL, ultivars.  f a UPOV member country, or s. must be U.S. based, owned by
b. If the original rights to variety were owned by a company(ies)  YES  1. Additional explanation on ownership (If needed, use the reverse)  DP 5690 RR contains a proprietary gene, patented by	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):  by the Monsanto Company and lice of glyphosate herbicide in cotton country  sees) who meet the following criteria:  werson must be a U.S. national, national of the U.S. for the same genus and species  yed the original breeder(s), the company is country which affords similar protection to	ed company?  censed to D&PL, ultivars.  f a UPOV member country, or s. must be U.S. based, owned by nationals of the U.S. for the same
b. If the original rights to variety were owned by a company(ies)  YES  1. Additional explanation on ownership (If needed, use the reverse  DP 5690 RR contains a proprietary gene, patented by which encodes a protein which provides tolerance to which encodes a protein which provides tolerance to the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals of a treatment of the rights to the variety are owned by the company which employnationals of a UPOV member country, or owned by nationals of a genus and species.	NO If no, give name of country  ), is (are) the original owner(s) a U.S. base  NO If no, give name of country  for extra space):  by the Monsanto Company and lice of glyphosate herbicide in cotton country  sees) who meet the following criteria:  person must be a U.S. national, national of the U.S. for the same genus and species  yed the original breeder(s), the company is country which affords similar protection to original owner and the applicant must me	ed company?  censed to D&PL, ultivars.  f a UPOV member country, or s.  must be U.S. based, owned by a nationals of the U.S. for the same set one of the above criteria.

control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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